

Attachment "B" SPECIFICATIONS – Medium Duty Rescue Unit.

SPECIFICATION	TO SPEC	NOT TO SPEC	DEVIATION
CHASSIS, BRAKES & CAB:			
Minimum 375 horsepower engine.			
Expected minimum GVWR rating 16,500Kg			
The chassis shall be of steel construction only, and the specifics be provided in the proposal as per 1-6-2. – (A full description including grade, thickness, and tensile strength of the proposed material for body construction must be included with the proposal.)			
The chassis shall be a 4x4 style chassis. The Chassis chosen for this truck shall correlate with the intended purpose of the truck and be the recommended chassis for the design of build.			
The Chassis shall have ABS or Antilock Brake System.			
The truck shall have an internal 4-wheel drive transfer case.			
The Chassis shall be equipped with front and rear tow hooks.			
Auxiliary braking system functions are required to be above 36,000 lb (16,000 kg) GVWR as per NFPA 1901.			
An intake for supplied air will be plumbed in close proximity to the driver's side door to ensure operational air is maintained while the apparatus is not in use.			
Stopping distance of the intended apparatus shall be provided.			
CAB:			
A label indicating the height, length and GVWR of the vehicle is visible to the driver.			
The cab shall be fully enclosed and provide adequate space to accommodate a minimum of 2 personnel. (One driver operator, one officer) This is to include, but not be limited to adequate head space and leg room for firefighters in excess of 6 feet in height.			
The officer's chair (front passenger) will incorporate air ride suspension.			
All seats will require extra-long seat belts.			
All apparatus digital readouts and displays shall be in easy view of the apparatus operator.			

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Grab handles shall be installed for use on every door to ensure three-point contact while entering and exiting the apparatus.			
In-cab space shall be utilized to its full potential - storage compartments shall be implemented wherever possible.			
The inside of the cab shall be of the open design and insulated against heat and sound intrusion.			
Cab shall include backup camera visible to the driver.			
Driver and passenger mirrors shall be controlled electrically and be heated.			
A foot pedal control for the apparatus air horn shall be installed at both the operators and officers foot locations.			
An alarm shall be installed to alert the apparatus driver when a seatbelt has not been used by an occupant.			
A "SEAT BELTS REQUIRED" sign shall be installed in the cab and visible from every seating position.			
BODY:			
The apparatus body shall be built of aluminum and fibreglass construction using a minimum of 125-inch aluminum body panels and metals used in the construction of the body to prevent corrosion. The supplier must outline and submit the method of construction and material properties for approval by the Purchaser.			
The body style shall be a partial walk-in medium rescue unit.			
Entry to the walk-in will be on the passenger side by means of double doors.			
The walk-in shall include a window on the driver's side of the apparatus, that can be used as a means of egress.			
An automatic drop-down step shall be incorporated beneath the walk-in doors to facilitate ease of entry.			
Walk-in shall contain bench seat with built in storage underneath and seat belts for a minimum of 3 firefighters.			

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The exterior of the walk-in shall have an external speaker for the base station radio, with an on/off control being at the command centre desk.			
The command centre desk shall have access to 110VAC electrical outlets. Minimum of two.			
Space for future fridge and cabinet shall be incorporated in the design of the command centre.			
Walk-in shall incorporate intercom system to communicate with driver.			
Walk-in shall have own HVAC controls.			
The supplier will provide the Purchaser with the most optimized compartment orientation to allow for maximum compartment storage possible. Shelving and storage orientation may be subject to change and review prior to the proposal being awarded.			
Rub rails shall be provided along the lower edge of the body. Rub rail assemblies shall be spaced out and isolated from the body with nonmetallic material. Rub rails are to be removable to allow for replacement in case of damage.			
IMPORTANT NOTICE: All horizontal surfaces covered with aluminum tread plate shall be the NFPA-compliant embossed nonslip type. No exceptions.			
A structural analysis of the body design shall have been performed and evidence of testing techniques and results made available upon request.			
Storage for spare SCBA bottles will be incorporated into rear wheel well storage areas with the forth holding a pullout absorb-all storage dispenser. SCBA bottle storage shall be padded at the rear and entry of each holster, and provide leashing or another restraining device to ensure SCBA bottles remain stationary while the apparatus is in motion. Alternate means of SCBA and absorb-all storage will be entertained.			
The body shall have a minimum 10-year structural warranty.			

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Options for equipment electrical supply in cabinets which are fed directly from the truck or shoreline supply shall be presented by the supplier based upon documented examples of previous client success.			
The rough wiring for an electrical winch shall be prepared in the front bumper to allow for a minimum rating of 9500lbs.			
Top of the apparatus shall incorporate storage compartments.			
Top of the apparatus shall be accessible by means of a fold away ladder at the rear of the apparatus.			
The tires for the truck must be suitable for off-road operations.			
In compliance with NFPA 1901 Annex B, 15.7.5, warning signs prohibiting riding on outside of apparatus shall be present.			
Hand rails on apparatus shall comply with NFPA 1901 Annex B 15.8.1, 3, and 4.			
Reflective striping on the apparatus shall comply at minimum with NFPA Annex B in regards to 4 inch in length, and applicable percentages.			
The rear of the vehicle shall have alternating yellow and red stripes in a chevron pattern which will be 6 inches and cover at least 50% of the rear vertical surface.			
The supplier shall accommodate for a third party to install a base station radio on the cab and walk-in. The installation of these items shall not have any effect on the warranty of the apparatus.			
All equipment required to be used during a response is to have bracketing or fastening in compartments. Creativity in storage techniques and concepts to maximize storage space is encouraged by the supplier. Preference may be given to suppliers who will provide complimentary truck outfitting in conjunction with the NFPA 1901 2016 edition.			
100' cord reel shall be incorporated in the rear storage cabinet of the apparatus.			

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Apparatus shall be capable of storing: • Struts • Cribbing • Spine boards • Medical equipment • Fuel • Saws • Various hand tools • Various power tools			
AIR INTAKE, SUPPLIED AIR, EXHAUST:			
A dry-type air cleaner, suitable for the engine being proposed, shall be installed and mounted as to provide easy access for serviceability.			
A mechanical air restriction indicator will be mounted where visible from the in-cab service door. It shall also trigger a warning light on the dash to indicate a clogged air filter.			
The system designed to prevent water and embers from reaching the air filter meeting NFPA standards shall be provided.			
Moisture spigots for both the primary and secondary air tanks shall be easily accessible to allow for any moisture to be drained from the air tanks.			
An air dryer which meets the trucks specifications shall be present, with supporting documentation included in the proposal.			
A supplied air intake to ensure that both primary and secondary tanks will remain at full air while the apparatus is not in use shall be located in close proximity to the driver/operator door.			
While it is preferred that the supplied air intake be "auto eject," reasonable substitutions may be entertained with the initial proposal.			
Exhaust shall be vertical and incorporated into the build to ensure that heat and exhaust are expelled away from the apparatus and it's occupants.			
Guards and shields shall be placed in areas where heat may impede on the ground, personnel, or other parts of the apparatus.			
ELECTRICAL LIGHTING & AUDIBLE			
Isolation or insulation shall be provided to protect personnel from electrical shock.			

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The alternator on the truck shall exceed the maximum electrical requirements for all electronic components on the apparatus. All compliance documentation supporting this shall be provided.			
A load master device shall be implemented to assist the apparatus in prioritizing primary and secondary electrical functions. Documentation detailing this prioritization shall be provided.			
Minimum of 3500W inverter shall be used on the truck.			
All outlets on the apparatus shall function while attached to shore-line or running off the inverter.			
100' extension cord reel shall be incorporated in the rear storage of the apparatus.			
All controls, switches, instructions, gauges and instruments needed for operation shall be illuminated with LED lighting.			
All warning and responding lights shall comply with the NFPA 1901.			
A rear-mounted traffic directional lighting device shall be implemented with controls being in close proximity to the apparatus operator.			
All compartments shall have LED illuminated lighting.			
The top of walk-in shall incorporate LED light tower with wired controller.			
The sides and rear of the apparatus shall be illuminated for working.			
Ground lighting shall be LED and implemented in all areas where persons will be stepping or climbing.			
Ground lighting will illuminate automatically with cab doors becoming ajar.			
A flashing red light in the cab compartment will flash in conjunction with an audible alarm if the parking brake is released while: - a seat belt is not fastened in an occupied seat - a passenger door is open - a compartment is open - a permanently attached device, light or ladder is not stowed			

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Any in cab visual warnings shall be accompanied by audible warnings in the cab.			
An Emergency Siren/Public Address system shall be installed which is certified to SAE J1849 and Alberta Transportation and NFPA 1901 standards. The siren shall have three variations which incorporate at a minimum both "wail" and "hi-lo" with variable gain.			
An audible emergency warning air horn shall be installed with controls being a pedal at both the foot of the driver and the front passenger "officer" seats. This is not to be confused with a conventional vehicle horn, which shall also be present, yet operated separately.			
All Audible alarm controls shall be in close proximity to the operator/driver.			
DRIVE UNIT:			
The truck transmission shall be a 4x4 wheel drive hi range - low range 6 speed heavy duty off-road Allison transmission which shall provide sufficient torque and power transfer to allow the engine to run efficiently and effectively while the truck is being used in off-road operations. Supporting documentation outlining specifications shall be provided with the proposal.			
COOLING/HEATING SYSTEM:			
The cooling system shall have sufficient capacity to meet extended periods of full load operation in local ambient temperatures (from - 40C to +35C) and maintain the engine at a temperature not to exceed maximum or minimum operating temperature as recommended by the engine manufacturer. High temperature and low coolant alarms shall be provided in the cab as per NFPA standards.			
The radiator shall meet or exceed the cooling requirements specified by the engine manufacturer under all operating conditions.			